## ABSTRACT OF THE DISCLOSURE

## A METHOD AND SYSTEM FOR DNA ANALYSIS

The present invention pertains to a process for automatically analyzing nucleic acid samples. Specifically, the process comprises the steps of forming electrophoretic data of DNA samples with DNA ladders; comparing these data; transforming the coordinates of the DNA sample's data into DNA length coordinates; and analyzing the DNA sample in length coordinates. This analysis is useful for automating fragment analysis and quality assessment. The automation enables a business model based on usage, since it replaces (rather than assists) labor. This analysis also provides a mechanism whereby data generated on different instruments can be confidently compared. Genetic applications of this invention include gene discovery, genetic diagnosis, and drug discovery. Forensic applications include identifying people and their relatives, catching perpetrators, analyzing DNA mixtures, and exonerating innocent suspects.